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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,578	01/29/2002	Klas Goran Eriksson	8036-1003	7969

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EXAMINER

PUNNOOSE, ROY M

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/059,578

Applicant(s)

ERIKSSON, KLAS GORAN

Examiner

Roy M. Punnoose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-14, 16-30 is/are rejected.
- 7) ☒ Claim(s) 5-8 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## DETAILED ACTION

### *Specification*

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading.

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (d) BRIEF SUMMARY OF THE INVENTION.
- (e) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (f) DETAILED DESCRIPTION OF THE INVENTION.
- (g) CLAIM OR CLAIMS (commencing on a separate sheet).
- (h) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

2. Several of the section headings are missing in the specification. Appropriate correction is required.

3. The disclosure is objected to because of the following informalities: the sentence starting on line 28 of page 3 is incomprehensible. It is not clear what is meant by "the or" (lines 29, 30). Appropriate correction is required.

### *Claim Objections*

4. Claim 28 is objected to because of the following informalities: It is not clear what is meant by "the or" (lines 2-3). Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 30 provides for the use of apparatus according to claim 1, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 30 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

7. Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. Claims 1-4 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Santschi et al (US\_5,760,911).

10. Santschi et al (Santschi hereinafter) discloses an apparatus for use in monitoring particles in a fluid flow, comprising:

a duct 20 for receiving the fluid flow,

light generating means 16 adjacent the duct for transmitting light into the fluid flow via a first at least partially light-transmissive part of the duct 20;

light-responsive detection means 18 adjacent a second at least partially light-transmissive part of the duct for receiving light from the light generating means 16 which has passed through the fluid flow;

processing means 10 for location remotely from said duct; and means for coupling the processing means with the detection means 18, the processing means 10 being adapted for processing signals therefrom to provide data relating to particles in the fluid flow (see col.4, line36- col.5, line 47), wherein said duct comprises a pipe section provided with means for mounting it in a run of pipework ( see Figure 1), wherein said first and second at least partially light-transmissive parts comprise first and second windows in a wall of the duct, and, said first and second at least partially light-transmissive parts are diametrically opposite each other.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 9-14, 16-25, 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Santschi et al (US\_5,760,911) in view of what is commonly known in the art.

13. Claims 9-11 are rejected because Santschi teaches all claim limitations except the explicit teaching of the use of light emitting diodes (LEDs) as a light source in an apparatus for monitoring particles in a fluid flow.

It is well known in the art that LEDs are used as light source in a variety of applications including particle detection systems.

In view of what is well known in the art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a regular light source with LED light source connected in parallel due to the fact that LEDs can be chosen for its narrow wavelength characteristics, energy efficiency and longer lifespan and therefore higher reliability in an apparatus for monitoring particles in a fluid flow. Accordingly, such substitution would have constituted an alternative means/obvious engineering expedience for one of ordinary skill in the art at the time the invention was made.

14. Claims 12 and 13 are rejected because use of television camera and frame grabber for capturing and storing images of any sample under test is old and well known. Accordingly, incorporating it into an apparatus for monitoring particles in a fluid flow would have constituted an alternative means/obvious engineering expedience for one of ordinary skill in the art at the time the invention was made.

15. Claim 14 is rejected because in view of Santschi's teachings of providing particle size data, it would have been obvious to one of ordinary skill in the art at the time the invention was

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made to have a processing means that provides data relating to the amount and/or size distribution of particles of a predetermined kind in the fluid flow.

16. Claims 16-18 are rejected because they are mere duplication of detection means of claim 1.

17. Claims 19-22 are rejected because they are mere duplication of partially light transmissive parts of claim 1.

18. Claims 23-25 are rejected because they are mere duplication of light generating means of claim 1.

19. Claim 27 is rejected because in view of Santschi's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the pipework for conveying water or any other fluid.

20. Claim 29 is rejected because in view of Santschi's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select a remote location that is the topside of a platform.

#### ***Claim Objections***

21. Claims 5-8 and 15 are objected to because they are dependent on rejected base claims.

#### ***Allowable Subject Matter***

22. Claims 5-8 and 15 would be allowable if the rejections to the base claim(s) set forth in this Office action can be overcome.

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***Conclusion***


23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Examiner Roy M. Punnoose** whose telephone number is **703-306-9145**. The examiner can normally be reached on 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the applicant can reach his **Supervisory Patent Examiner, Frank G. Font**, at (703) 308-4881.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-0530.

**Roy M. Punnoose**  
Patent Examiner  
Art Unit 2877  
July 14, 2003



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**Mr. Frank G. Font**  
Supervisory Patent Examiner